29th Annual FRONTIERS

UNDERGRADUATE RESEARCH POSTER EXHIBITION

April 15, 2026

2:00 - 3:30 p.m. • 4:00 - 5:30 p.m.
6:00 - 7:30 p.m.
Student Union Ballroom

Schedule of Events

Poster Exhibition

Wednesday, April 15, 2026

Session 1: 2:00 p.m. – 3:30 p.m.
Session 2: 4:00 p.m. – 5:30 p.m.
Session 3: 6:00 p.m. – 7:30 p.m.

Session Welcome

Micah Heumann,
Director, Office of Undergraduate Research

Mentorship Excellence Awards

The Faculty and Graduate Student Mentorship Awards will be presented at the ***University Teaching, Advising & Mentoring Awards*** ceremony on **May 1, 2026.**

Faculty Awards

Dr. Alexander Dupuy
Assistant Professor, Materials Science and Engineering

Dr. Shareen Hertel
Professor, Political Science and Human Rights

Graduate Student Award

Cheyenne Summers
Ph.D. Candidate, Animal Science

Closing Remarks

About Frontiers in Undergraduate Research

The Frontiers Poster Exhibition is a multidisciplinary research forum showcasing undergraduate research, scholarship, and creative projects at the University of Connecticut. Frontiers 2026 is the twenty-eighth annual Frontiers event sponsored by the Office of Undergraduate Research (OUR). This year's exhibition includes 270 students presenting posters for 244 research and creative projects at the Storrs in-person exhibition. The inaugural in-person exhibition at the Waterbury campus on April 14, 2026, will showcase 32 students presenting 15 research and creative projects. 25 students will present 18 research and creative projects at the Stamford in-person exhibition on April 21, 2026. Additional projects can be viewed in the online exhibition at ugradresearch.uconn.edu/frontiers2026.

Students' projects span the disciplines and include both independent research and work pursued in collaboration with other undergraduates. The projects presented reflect the invaluable contributions of research mentors, including graduate students, postdoctoral scholars, staff, and faculty members. We hope you enjoy meeting our wonderful students and learning about their innovative projects.

About the Office of Undergraduate Research

The Office of Undergraduate Research (OUR) is a resource for students interested in enriching their undergraduate experience through participation in research, scholarship, and creative activity. OUR provides information and advising to assist students in identifying relevant opportunities, as well as several funding programs to support the students and their faculty mentors.

Many of the Frontiers presenters have received financial support for their projects from the OUR, which awarded over $700,000 in 2023-24 in support of students' research and creative endeavors. These awards are funded by the Office of Undergraduate Research with generous support from the Office of the Provost, the Office of the Vice President for Research, the deans of the schools and colleges, and private donations from alumni, parents, and other friends of UConn and undergraduate research.

Sequential Listing of Poster Presentations

This listing of projects includes the undergraduate student authors and their faculty mentors. Please note that this is not a comprehensive listing of mentors: many projects also reflect the contributions and mentorship of dedicated graduate students, post-doctoral scholars, and research staff members.

SESSION 1 PRESENTATIONS

1. Tidewrack
Iris Yu, Fine Arts-Drawing and Painting & Physiology and Neurobiology
Advisor: Alexis Boylan, Professor, Art and Art History
Advisor: Jeanne Ciravolo, Assistant Professor in Residence, Art and Art History

2. In Search of "The Search for the Lost Husband": Returning the Aarne-Thompson-Uther Index's Tale Type 425 to a Space of Oral Tradition and Visual Representation
Emily Finch, English & IMJR: Creating and Educating for the Stage and Screen
Advisor: Darcie Dennigan, Associate Professor in Residence, English
Advisor: Gregory Semenza, Professor, English
Advisor: Sandi Carroll, Assistant Professor in Residence, Dramatic Arts

3. Exploring How Students' Enjoyment of Healthy versus Unhealthy Foods Changes at the UConn Dining Halls Compared to Other Environments
Hassan Hussain, Sociology
Advisor: Marlene Schwartz, Professor, Human Development and Family Sciences

5. Identifying the Barriers and Facilitators to Education on Lead Exposure for Immigrant Families with Young Children in Connecticut
Braydon Cretella, Nursing
Advisor: Katherine Bernier, Assistant Professor, Nursing

6. What Elementary and Middle School Students Need to Thrive: An Exploratory Analysis Through the Lens Maslow's Hierarchy of Needs
Emily Dubin, Human Development and Family Sciences
Advisor: Maria LaRusso, Associate Professor, Human Development and Family Sciences

7. Transition-Age Youth in Foster Care: A Policy and Content Analysis of Education and Support Resources by State
Lauryn Gaylord, Human Development and Family Sciences
Advisor: Preston Britner, Professor Britner, Human Development and Family Sciences

8. Assessing Socioeconomic Status and Male Caregivers on Future Psychopathy
Anisa Rafik, Psychological Sciences & Criminal Behavior
Christian Denton, Psychological Sciences
Zuleydy Torres, Psychological Sciences
Hannah van Rijnswou, Psychological Sciences & IMJR: Criminology
Lauren Villanueva, Molecular and Cell Biology
Advisor: Jeffery Burke, Associate Professor, Psychological Sciences

9. Defining Racism and Its Impact on Black Adolescent Girls
Iva Filipovic, Psychological Sciences
Jenna Griesing, Psychological Sciences
Seth Friedeman, Molecular and Cell Biology & IMJR: Nutritional Psychology and Disordered Eating
Neena Bisconti, Psychological Sciences
Advisor: Amy Egbert, Assistant Professor, Psychological Sciences

10. The Effect of Various Parenting Practices on the Symptom Count of Eating Disorder Symptoms Over Time
Sumedha Sabbani, Psychological Sciences
Charleigh Seitzinger, Psychological Sciences
Ann Macenat, Psychological Sciences
Emily Ieronimo, Psychological Sciences & Human Development and Family Sciences
Advisor: Jeffrey Burke, Associate Professor, Psychological Sciences

11. The Relationship Between Neurocognitive Functioning, Depression, Suicidal Ideation, and Attractiveness in Athletes
Alexandria Dominique, Psychological Sciences
Advisor: Ryan Talbert, Assistant Professor, Sociology

12. Perceived vs. Objective Neighborhood Characteristics, and Sleep Quantity and Quality among U.S. Adolescents
Vangmayee Upadhyay, Allied Health Sciences
Advisor: Ryan Talbert, Assistant Professor, Sociology

13. The Neurological and Psychiatric Manifestations of Adoption and Foster Care by Race and Gender
Akeva Koulla, Biomedical Engineering
Advisor: Ryan Talbert, Assistant Professor, Sociology

14. PRISM: Priming Relationships in Syntax and Mathematics
Michelle Zhu, Secondary Mathematics Education & Mathematics
Advisor: Adrián Garcia-Sierra, Associate Professor, Speech, Language, and Hearing Sciences
Advisor: Megan Staples, Associate Professor, Curriculum and Instruction
Advisor: Erin Rizzie, Assistant Professor in Residence, Mathematics

15. Uses and Perceptions of Rubrics in English Language Arts Education
Jessica DiTommaso, Secondary English Education & English
Advisor: Catherine Little, Professor, Educational Psychology

16. A Sociohistorical Look at Connecticut Marine Debris
Hiis LaRose, Secondary History/Social Studies Education, History & Sociology
Advisor: Mars Plater, Assistant Professor, History

17. Evaluating Anti-Communism: Bias in the American News
Katerina Anikeev, Political Science & Applied Data Analysis
Advisor: Fyansia Nsilo-Swai, Research Services Librarian, Research Services
Advisor: Alexander Anievas, Associate Professor, Political Science

18. More than Mask: How South Korea Leverages Private Industry to Cultivate Global power though Beauty and Culture
Ashley Soto, Political Science
Advisor: Miles Evers, Assistant Professor, Political Science
Advisor: Virginia Hettinger, Alan R. Bennett Honors Professor, Associate Professor, Political Science

19. Thinking About U: Theorizing the Inverted-U Theory as a Function of Test Anxiety and Working Memory Capacity
Mukrim Rahman, IMJR: Behavioral and Developmental Neuroscience
Advisor: Jeffrey Pella, Assistant Professor, Psychiatry

20. Low-Frequency EEG Oscillations in Phonological Deficits: Resting-State Evidence from Developmental Dyslexia Subtypes
Laura Colonna de Lega, Biological Sciences
Advisor: Silvia Clement-Lam, Assistant Research Professor, Psychological Sciences

21. Disability Identity: Responses to Disclosure
Atyana DelValle, Psychological Sciences
Mahasin Gudaf, Psychological Sciences
Advisor: Alexandra Garr-Schultz, Assistant Professor, Psychological Sciences

22. Examining the Relationships Among Acculturation, Negative Life Events, and Adolescent Psychopathology
Naz Chaudry, Psychological Sciences
Samantha Moran, Psychological Sciences
Advisor: Jeffrey Burke, Associate Professor, Psychological Sciences

23. Gendered Disparities in the Initial Stages of the PrEP Care Cascade Among People Who Inject Drugs: A Literature Review
Heather Keane, Molecular and Cell Biology & IMJR: Health Disparities and the Development of Illness
Advisor: Michael Copenhaver, Professor, Allied Health Sciences

24. Establishing Interrater Reliability for Conversational Discourse Analysis of People with Aphasia
Emma Cleary, Speech, Language, and Hearing Sciences
Advisor: Jennifer Mozeiko, Associate Professor, Speech, Language, and Hearing Sciences

25. Investigating How Confidence Influences Musical Aptitude
Alexa Calegari, Speech, Language, and Hearing Sciences
Advisor: Erika Skoe, Professor, Speech, Language, and Hearing Sciences

26. Risks of Ototoxicity in Newly Emerging U.S. Prescribed Drugs Targeting GLP-1 Receptors Semaglutide (Ozempic) & Tirzepatide (Mounjaro), A Literature Review
Tea Tola, Physiology and Neurobiology
Advisor: Erika Skoe, Professor, Speech, Language, and Hearing Sciences
Advisor: Janet Desmarais, Lab Manager, Speech, Language, and Hearing Sciences

27. "Behind the Screen": How Remote Court Proceedings Shape Outcomes, Fairness, and Access to Justice
Vidhisha Thakkar, Political Science & Accounting
Advisor: Kimberly Bergendahl, Associate Professor in Residence, Political Science
Advisor: Virginia Hettinger, Alan R. Bennett Honors Professor, Associate Professor, Political Science

28. Equity or Reverse Discrimination: How Competing Narratives Influence Public Support for DEI Policies
Addie Concascia, Political Science
Advisor: Jason Byers, Assistant Professor, Political Science
Advisor: Virginia Hettinger, Alan R. Bennett Honors Professor, Associate Professor, Political Science

29. Investigating the Role of Matrix Metalloproteinase 2 in Regulating Border Cell Migration in *Drosophila melanogaster*
Roma Kale, Physiology and Neurobiology & Molecular and Cell Biology
Advisor: Jianjun Sun, Professor, Physiology and Neurobiology

30. Investigating Early-life Factors Contributing to the Integration of Developmentally-specified Hippocampal Neurons
Anika Agrawal, Physiology and Neurobiology & Psychological Sciences
Advisor: Sebnem Tuncdemir, Assistant Professor, Neuroscience

31. Evaluating Endothelial-Mediated Vascular Function in Frail Older Adults: A Pilot and Exploratory Study
Anna Dietz, Physiology and Neurobiology
Advisor: Oh Sung Kwon, Assistant Professor, Kinesiology

32. Play to Win: A Randomized Controlled Trial to Assess the Effects of Play-Based Training on Upper Extremity Function in Children with Hemiplegia
Vivian London, Allied Health Sciences
Advisor: Sudha Srinivasan, Assistant Professor, Kinesiology

33. The Role of Parvulbumin-interneuron COP1 in Social Interaction Behavior in Mice
Sudiksha Gadiraju, Biological Sciences
Advisor: Xin-Ming Ma, Associate Professor, Neuroscience

34. Home Cage Pre-training Enhances Behavioral Task Performance in Head-fixed Mice
Richard Zou, Physiology and Neurobiology
Advisor: Nicholas Audette, Assistant Professor, Psychological Sciences

35. Reinforcement Rewired: A Review of Contingency Management Tech-Enabled Interfaces
Gabriel Lee, Biological Sciences
Advisor: Carla Rash, Associate Professor, Medicine

36. The Use of Myostatin Inhibition to Treat Cancer Cachexia and Muscular Atrophy: A Systematic Review
Aidan Rapuano, Molecular and Cell Biology
Advisor: Ping Zhang, Associate Professor, Molecular and Cell Biology

37. Inosine Accelerates Cancer Cell Killing by the Experimental Antifolate UCP1162R: Implications for Novel Combination Treatments
Reshma Ramesh, Physiology and Neurobiology & Psychological Sciences
Advisor: Charles Giardina, Professor, Molecular and Cell Biology

38. Development of Doxycycline-Inducible CRISPR-Interference Screening System to Identify Genes Involved in Tet2-Deficient Clonal Hematopoiesis
Nhung Phan, Molecular and Cell Biology
Advisor: Hideyuki Oguro, Assistant Professor, Cell Biology

39. The Development of a CRISPR-Based Calibrated Functional Assay for Classifying Pathogenicity of MSH2 and MSH6 Variants in Lynch Syndrome
Olivia Amodeo, Molecular and Cell Biology
Advisor: Christopher Heinen, Professor, Medicine

40. Genomic Determinants of Readthrough Transcription in Retinal Pigment Epithelium Cells During Oxidative Stress
Nora Lippai, Molecular and Cell Biology
Advisor: Leighton Core, Associate Professor, Molecular and Cell Biology

41. Isolation of the Native NPR1 Transmembrane Signaling Complex
Andrew Kim, Molecular and Cell Biology
Advisor: Steven Chou, Assistant Professor, Molecular Biology and Biophysics

42. Structural Organization of the Purkinje Cell Axon Initial Segment: Relationships with Basket Cell Pinceaux and Local Microdomain Remodeling
Shez Jakhro, Physiology and Neurobiology
Advisor: Mark Terasaki, Associate Professor, Cell Biology
Advisor: Akiko Nishiyama, Professor, Physiology and Neurobiology

44. Gut Microbiota Modulates Blackcurrant Attenuation of Inflammation and Fibrosis in Epididymal White Adipose Tissue of HFHS-Fed Male Mice
Claire Gallagher, Nutritional Sciences
Kelly Nguyen, Pathobiology
Advisor: Ji-Young Lee, Professor, Nutritional Sciences
Advisor: Young-Ki Park, Assistant Research Professor, Nutritional Sciences

45. One Health Approach to Pathogenic Leptospira Detection in Water Sources in Storrs, CT
Ellie Borton, Animal Science
Advisor: Elsio Wunder, Assistant Professor, Pathobiology and Veterinary Science
Advisor: Camila Hamond Regua Motta Reis, Assistant Research Professor, Pathobiology

46. In vitro Cell Translocation Model as a System to Investigate Host Differences during Early-stage Leptospirosis Infection
Arineemal Kaul, Molecular and Cell Biology
Advisor: Elsio Wunder, Assistant Professor, Pathobiology and Veterinary Science

47. Isolation and Identification of Soil Bacteria with Antimicrobial Activity
Madeline Scully, Molecular and Cell Biology
Advisor: Patricia Rossi, Associate Professor in Residence, Molecular and Cell Biology
Advisor: Spencer Nyholm, Professor, Molecular and Cell Biology

48. Fluorescence Detection of Protein Biomarkers for Alzheimer's Disease
Vanshika Patel, Molecular and Cell Biology
Advisor: James Rusling, Professor, Chemistry
Advisor: Barbara Mellone, Professor, Molecular and Cell Biology

49. BaTiO3 Nanoparticles for Megavoltage Radiation Dose Enhancement
Rakshan Chadha, Molecular and Cell Biology & Statistics
Maya Ganguli, Molecular and Cell Biology
Advisor: Henry Smilowitz, Associate Professor, Cell Biology

50. The Synergic Role of Electrical and Chemical Stimulation in Wound Healing of Diabetic Patients
Laxmi Chinmaya Vobbineni, Biomedical Engineering & Molecular and Cell Biology
Advisor: Sangamesh Kumbar, Professor, College of Dentistry, University of Nebraska Medical Center

51. Controlled Microenvironment Using Semi-Permeable Polymer Nanocapsules
Luke Pratley, Molecular and Cell Biology
Advisor: Eugene Pinkhassik, Associate Professor, Chemistry

52. Development and Characterization of Antiviral-Loaded DSPC Liposomes for PRRSV
Daniyal Saleem, Physiology and Neurobiology
Advisor: Diane Burgess, Distinguished Professor, Pharmaceutical Sciences

53. The Role of Translesion Synthesis Polymerases in the Development of Resistance to 6-TG/MP in Acute Lymphoblastic Leukemia
Sarah Woytowich, Physiology and Neurobiology
Advisor: Hunmin Jung, Assistant Professor, Pharmaceutical Sciences

54. Investigating Inhibitory and Activating Compounds of Phosphoantigen-Induced, Butyrophilin-Mediated Gamma-Delta T Cell Activation
Andy Dong, Molecular and Cell Biology
Advisor: Andrew Wiemer, Professor, Pharmaceutical Sciences

55. Assessing the Town of Manchester's Compliance with PA 25-33 and MS4
Katharine Batchelar, IMJR: International Studies and Global Sustainability
Advisor: Owen Placido, Visiting Assistant Extension Educator, Department of Extension

56. Computational Modeling of DNA Damage Response Networks in High-Grade Serous Ovarian Cancer Risk: A Focus on Classic PCOS (Phenotype A) and Androgen Signaling
Charli Hughes, Computer Science & Molecular and Cell Biology
Advisor: Jennifer Jorgensen, Assistant Professor, Obstetrics and Gynecology

58. Impact of Carbamylation on Tropoelastin Structure
Benjamin Fieldsend, Biomedical Engineering
Advisor: Anna Tarakanova, Associate Professor, School of Mechanical, Aerospace, and Manufacturing Engineering

59. Purifying Potential - Optimization of Janus Base Nanoparticles in Gene Therapy
Qianyu Chen, Biomedical Engineering
Advisor: Yupeng Chen, Associate Professor, Biomedical Engineering

60. The Optimization of the Scanning and Meshing Workflow for the Creation of Personalized 3D-Printed Breast Prosthetics
Quentin Lane, Biomedical Engineering
Advisor: Liisa Kuhn, Professor, Biomedical Engineering
Advisor: Patrick Kumavor, Associate Professor in Residence, Biomedical Engineering

61. Redefining Comfort and Safety: 3D Printing in Football Padding
Isaiah Williams, Biomedical Engineering
Advisor: Liisa Kuhn, Professor, Biomedical Engineering

63. Forecasting in Time Series with The Mamba Architecture: A Linear-Time Sequence Model with Selective State Spaces
Matthew Venzie, Applied Mathematics & Statistics
Advisor: Yao Zheng, Associate Professor, Statistics

64. Applying Fuzzy Logic to Spatial Land Suitability Modeling for Finger Millet in East Africa
Katherine Patrick, Geographic Information Science
Advisor: Dan Wanyama, Assistant Professor in Residence, Geography

65. Using UHPLC-MS/MS Analysis to Detect and Quantify PFAS Contamination in Ingestible Vitamin and Supplement Tablets
Katherine Benoit, Chemistry
Mariana Doud, Allied Health Sciences
Advisor: Anthony Provatas, Organics Laboratory Manager and Research Professor, Center for Environmental Sciences and Engineering

66. Identification of PFAS in Surface Samples using FTIR Analysis
Anjali Meruva, Allied Health Sciences
Supreme Kc, Chemistry
Advisor: Anthony Provatas, Organics Laboratory Manager and Research Professor, Center for Environmental Sciences and Engineering

67. Carbon Nanotube Processing for Soft Actuators
Matthew Francoeur, Materials Science and Engineering
Advisor: Mihai Duduta, Assistant Professor, School of Mechanical, Aerospace, and Manufacturing Engineering

68. Silver Nanoparticle-Based Antifouling Boat Coatings
Peyton Schneider, Chemistry
Advisor: Steven Suib, Distinguished Professor, Chemistry

69. Modulation of Per- and Polyfluoroalkyl Substances (PFAS) Toxicity to Soil Protists via Co-Exposure with Microplastics and the Broader Societal Impacts of Microplastics
Mehr Chhatre, Chemical Engineering
Advisor: Leslie Shor, Vice Provost and Dean, Graduate Education
Advisor: Carol Atkinson-Palombo, Professor, Geography
Advisor: Daniel Gage, Professor, Molecular and Cell Biology

70. Window Materials for Aerogel RICH Detector at J-PARC
Owen Finch, Physics & Applied Mathematics
Michael Frank, Physics
Advisor: Kyungseon Joo, Professor, Physics

71. Photon Yield Optimization for the MARQ RICH Detector in the J-PARC E50 Experiment
Michael Frank, Physics
Owen Finch, Physics & Applied Mathematics
Advisor: Kyungseon Joo, Professor, Physics

72. ITAC 2024-2025 Assessments Recommendation Analysis
Brian Chan, Electrical Engineering
Advisor: Liang Zhang, Professor, Electrical and Computer Engineering

73. Physics-Informed Photovoltaic Power Loss Prediction from UAV Thermal Imagery
Nicholas Bailey, Management and Engineering for Manufacturing & Mathematics
Advisor: Liang Zhang, Professor, Electrical and Computer Engineering

74. Best Method to Find Air Compressor Leak Rate
Carter Morissette, Statistical Data Science
Advisor: Liang Zhang, Professor, Electrical and Computer Engineering

75. The Pecking Order: Comparing the Endangered Red Cockaded Woodpecker Genome to Other Well-performing Bird Species to Improve Conservation Efforts
Anastasia Serating, Plant Science
Peyton Durant, Molecular and Cel Biology
Deirdre McCrohan, Biological Sciences
Jenna Kent, Ecology and Evolutionary Biology
Advisor: Jill Wegrzyn, Associate Professor, Ecology and Evolutionary Biology
Advisor: Brandon Lind, Postdoctoral Research Associate, Ecology and Evolutionary Biology

76. Green Small Giants
Madhumita Muralidharan, Molecular and Cell Biology
Advisor: Hannah Larson, PhD Student, Ecology and Evolutionary biology

77. Ecoregional Species Distribution Models Outperform Range-Wide Approaches and Identify Climate Refugia for a Montane Mammal, the American Pika (*Ochotona Princeps*)
Gage Rovelli, Biological Sciences
Advisor: Mark Urban, Professor, Ecology and Evolutionary Biology

78. Fencing Reduced Black-crowned Night Heron Predation on Common Tern Eggs
Emily Winslow, Ecology and Evolutionary Biology
Advisor: Margaret Rubega, Professor, Ecology and Evolutionary Biology

79. Stochastic Methods for Measuring Circumbinary Accretion Disk Luminosity
Micah Banschick, Physics & Mathematics
Advisor: Jonathan Trump, Associate Professor, Physics

80. Porcine Oviductal Extracellular Vesicles Enhance Mouse Sperm Function
Stephanie Gilroy, Animal Science
Advisor: Maria Gracia Gervasi, Assistant Professor, Animal Science

81. Characterization of Phospholipase C δ4 in Bovine Sperm Capacitation
Makeda Staton, Animal Science
Advisor: Maria Gracia Gervasi, Assistant Professor, Animal Science

82. Dissecting the Composition of the Liver and Colon Metabolome in Colitis Mouse Models Fed with Cheese
Chien-Yi Yeh, Animal Science
Advisor: Breno Fragomeni, Associate Professor, Animal Science
Advisor: Mary Anne Roshni Amalaradjou, Associate Professor, Animal Science

83. CartograPlant: Bridging Genomic, Phenotypic, and Environmental Data to Advance Plant Resilience and Eco-evolutionary Insight
Huyen Trang Nguyen, Chemistry
Phoebe Zhou, Allied Health Sciences
Advisor: Jill Wegrzyn, Associate Professor, Ecology and Evolutionary Biology

SESSION 2 PRESENTATIONS

1. CT Unscene: A Documentary on the DIY Music Scene in Connecticut
Evan Elmore, Digital Media and Design
Advisor: Justin Liberman, Assistant Professor, Digital Media and Design

2. Exploring the Role of Hispanic-Serving Institutions in Ethnic Racial Identity Development: Insight from Latine Undergraduates at One Institution
Anytra Culbreath-Evans, Sociology
Advisor: Kevin Ferreira van Leer, Assistant Professor, Human Development and Family Sciences

3. How I See Her, How We See Us: Exploring Black Girls' Understanding of Girlhood Through Mother-Daughter Dyads
Taylor Bryan, Psychological Sciences & Human Development and Family Sciences
Advisor: Marketa Burnett, Assistant Professor, Human Development and Family Sciences

4. Exploring the Relationship between Sleep and Externalizing Behaviors in Preschool-Aged Children
Isabela Mejias, Nursing
Advisor: Eileen Condon, Assistant Professor, Nursing

5. Caregiver's Perspectives on Reducing Negative SRH Outcomes for Black Female Adolescents
Ira Sunderraj, Allied Health Sciences
Advisor: Christina Ross, Assistant Professor, Nursing

6. Exploring Multilevel Determinants of PrEP Modality Preferences: Preliminary Findings from a Systematic Review
Raquel Teper, Molecular and Cell Biology
Advisor: Pablo Kokay Valente, Assistant Professor, Allied Health Sciences

7. Understanding and Addressing Impacts of Legislation Banning Gender Affirming Mental Health Care in the U.S.: A Pilot Study of Mental Health Professionals
Ben Berthiaume, Women's, Gender, and Sexuality Studies & Sociology
Eliam Marshall, Social Work
Advisor: Meg Paceley, Associate Professor, Social Work

8. Who's Playing, Who's Paying, and Who's Using It: A Game-Theoretic Approach to Mobile Health Platform Design for Gen X Chronic Disease Management
Hunter Victorio, Management
Karlisse Wills, Marketing
Ryan Killeen, Management and Engineering for Manufacturing
Advisor: William Ryan, Assistant Professor in Residence, Marketing
Advisor: Joseph Pancras, Associate Professor, Marketing

9. The Antecedents, Consequences, and Prevention of Gender Harassment
Sanjana Sitaram, Healthcare Management and Insurance Studies
Advisor: Madison Malcore, PhD Candidate, Industrial and Organizational Psychology
Advisor: Vicki Magley, Professor, Psychological Sciences

10. A Non-Inferiority Trial Comparing Synchronous and Asynchronous Remotely-Delivered Lifestyle Interventions
Megan Washburn, Psychological Sciences
Elijah Edwards, Psychology & Sociology
Advisor: Sherry Pagoto, Professor, Allied Health Sciences

11. The Economics and Climate Change Drivers of the Decline in Connecticut's Clam Sector
Angela Zhang, Economics & Economics of Sustainable Development and Management
Advisor: Rigoberto Lopez, Professor, Agricultural and Resource Economics
Advisor: Metin Cosgel, Professor, Economics

12. The Relationship between Government Bailouts and Risk-Taking Behavior in Banks: A Case Study from the Great Financial Crisis of 2008-09
Derek Cameron, Economics
Advisor: Fan Yang, Associate Professor, Finance

13. When Whiteness is the Aesthetic: The Dominance of Racial Capital in the Creator Economy
Anastasia Charles, Political Science
Advisor: Evelyn Simien, Professor, Political Science

14. A Border of Broken Promises: The Unfulfilled Commitments of the CRC for Migrant Children at the U.S. Southern Border
Eva Passer, Political Science & Human Rights
Advisor: Kimberly Bergendahl, Associate Professor in Residence, Political Science
Advisor: Kristin Kelly, Associate Professor, Political Science
Advisor: Virginia Hettinger, Alan R. Bennett Honors Professor, Associate Professor, Political Science

15. The Role of Hybrid Governance in Shaping Gentrification Trajectories: Evidence From Downtown Flushing, New York
Yaeyoung Min, Political Science
Advisor: Meina Cai, Associate Professor, Political Science

16. From Promise to Practice: A Qualitative Analysis of the De Jure-De Facto Gap in the Individuals with Disabilities Education Act
Alyssa Piccoli, Political Science & Sociology
Advisor: Shareen Hertel, Professor, Political Science & Human Rights
Advisor: Virginia Hettinger, Alan R. Bennett Honors Professor, Associate Professor, Political Science

17. Cannabidiol (CBD) Does Not Reduce Self- Reported Anxiety Despite Physiological Effects
Mia Tzikas, Psychological Sciences
Noha Myreen, Molecular and Cell Biology
Advisor: Robert Astur, Associate Professor, Psychological Sciences

18. Negative Messaging for Women of Color in the Workplace: Impacts on Social Anxiety & Collective Identity Coherence
Ally Padilla, Psychological Sciences
Advisor: Alexandra Garr-Schultz, Assistant Professor, Psychological Sciences

19. Anxiety, Depression Comorbidity and Internalized Stigma: Associations with Quality of Life
Cana Kumi, Psychological Sciences & Economics
Advisor: Diane Quinn, Professor, Psychological Sciences

20. Psychopathology and Physical Pain in Youth: Bidirectional and Predictive Associations
Alexsia Newman, IMJR: Developmental Neuroscience & Spanish
Advisor: Jonas Miller, Assistant Professor, Psychological Sciences

21. Mapping Inequity: How Food Access and Rurality Shape Gastrointestinal Cancer Risk Across US Counties
Ved Bathula, Molecular and Cell Biology & Pathobiology
Eshita Mathur, Molecular and Cell Biology
Eashwar Krishna, Molecular and Cell Biology & Sociology
Advisor: Thomas Abbott, Associate Professor in Residence, Molecular and Cell Biology

22. How Learning Goals Can Shape Information Graphic Content
Bianca Hriscu, Linguistics-Psychology & Speech, Language, and Hearing Sciences
Advisor: Derek Houston, Professor, Speech, Language, and Hearing Sciences
Advisor: Torri Ann Woodruff-Gautherin, Research Scientist, Speech, Language, and Hearing Sciences

23. Linguistic Style Markers as Risk Factors for Anxiety Contagion in Anxious Adolescents
Samantha Cipolla, Psychological Sciences
Advisor: Kimberli Treadwell, Associate Professor, Psychological Sciences

24. A Network Science Approach to Visual Word Recognition
William Haddad, Cognitive Science
Advisor: James Magnuson, Professor, Psychological Sciences

25. Assessment of Combining Fluoxetine with the DA Transport Inhibitor GBR 12909 in Reversing the Behavioral Effects of Tetrabenazine on the Fixed Ratio 5/Choice Task
Sofia Papanikolaou, Physiology and Neurobiology
Advisor: John Salamone, Distinguished Professor, Psychological Sciences

26. Evaluation of Antidepressants for Attenuation of Effort-Related Motivational Dysfunction in Male and Female Rats: The Importance of Dopamine
Amna Besirevic, Psychological Sciences
Advisor: John Salamone, Distinguished Professor, Psychological Sciences

27. Observational Learning in Rats: Impact of Observer Social Dominance
Srinitya Kamma, Physiology and Neurobiology & Psychological Sciences
Brielle Pierre Philippe, Psychological Sciences
Advisor: Etan Markus, Professor, Psychological Sciences

28. When is Dinner? Subjective Time Estimation in Rats
Alissa Christensen, Psychological Sciences & English
Abi Sadinsky, Psychological Sciences
Gianna Lauretano, Physiology and Neurobiology
Brielle Pierre Philippe, Psychological Sciences & IMJR: Neuroscience of Health and Behavior
Srinitya Kamma, Physiology and Neurobiology & Psychological Sciences
Advisor: Etan Markus, Professor, Psychological Sciences

29. Upper Extremity Use During Play-Based Interventions for Children with Hemiplegia
Chevintha Edirisinghe, Physiology and Neurobiology
Katie Nguyen, Physiology and Neurobiology
Advisor: Sudha Srinivasan, Assistant Professor, Kinesiology

30. Assessing Fidelity of Intervention Delivery in a Randomized Controlled Trial Comparing Two Play-Based Interventions to Promote Upper Extremity Function in Children with Hemiplegia
Preeti Baiju, Psychological Sciences
Advisor: Sudha Srinivasan, Assistant Professor, Kinesiology

31. Temporal Sensitivity of Neurons in the Primary Visual Cortex of an Awake Rabbit
Angel Gupta, Physiology and Neurobiology
Advisor: Yulia Bereshpolova, Assistant Research Professor, Psychological Sciences

32. Evaluation of Shuttle-Assisted Insertion of a Flexible Polymer Neural Probe into an Agarose Brain Phantom
Sahnavi Rao Palimar, Physiology and Neurobiology
Advisor: Yulia Bereshpolova, Assistant Research Professor, Psychological Sciences

33. Cellular Mechanisms of Orientation Sensitivity in Rabbit Visual Cortex during Alert and Nonalert Brain States
Anshika Srivastava, Molecular and Cell Biology & Cognitive Science
Advisor: Yulia Bereshpolova, Assistant Research Professor, Psychological Sciences

34. A Window Into the Brain: Understanding Substance Use Disorders Through fMR
Pam Win, Psychological Sciences
Advisor: Nabin Koirala, Facility Scientist, Center for Open Research Resources and Equipment

35. Transcranial Direct Current Stimulation (tDCS): A Non-Invasive Approach to Modulate Brain Activity
Joel Agyemang, Allied Health Sciences
Kaitlyn Vitucci, Psychological Sciences
Advisor: Nabin Koirala, Facility Scientist, Center for Open Research Resources and Equipment

36. Cortical Dynamics of Speech Motor Control in Laryngeal Dystonia: An Electroencephalographic Investigation
Andre Ohanyan, Physiology and Neurobiology & Philosophy
Advisor: Nabin Koirala, Facility Scientist, Center for Open Research Resources and Equipment

37. Effects of Exogenous Ketone Body Supplementation on Fat Body metabolites in Drosophila
Michael Romero, Physiology and Neurobiology
Advisor: Geoffrey Tanner, Associate Professor in Residence, Physiology and Neurobiology

38. Topographical Mapping of Postnatal Neuron Progenitors through Ephs and Ephrins
Daniel Momoh-Oare, Physiology and Neurobiology
Advisor: Joanne Conover, Professor, Physiology and Neurobiology

39. Mouse Models of Ependymal Organization: Spatiotemporal Control of Neural Stem Cell Fate in the Developing Ventricular–Subventricular Zone
Grace Jos, Biomedical Engineering & Mathematics
Advisor: Joanne Conover, Professor, Physiology and Neurobiology

40. Expanding Intron Classification: Insights into Splice Site Variation and Evolution
Ava Anderson, Molecular and Cell Biology & Mathematics/Statistics
Advisor: Rahul Kanadia, Associate Professor, Physiology and Neurobiology

41. RNA-binding Proteins Contribute to the Pathogenesis of Muscular Diseases in Drosophila.
Kimberly Cabello, Molecular and Cell Biology
Advisor: Jianzhong Yu, Associate Professor, Physiology and Neurobiology

42. Role of CD13 in Thioglycolate Elicited Peritoneal Macrophage Fusion and Multinucleated Giant Cell Formation
Nikhil Thimma, Physiology and Neurobiology
Advisor: Mallika Ghosh, Assistant Professor, Cell Biology

43. Does Pre-irradiation Increase BaTiO3 Nanoparticle Uptake in a Murine Pancreatic Adenocarcinoma Model?
Melinda Frost, Physiology and Neurobiology
Rakshan Chadha, Molecular and Cell Biology & Statistics
Advisor: Henry Smilowitz, Associate Professor, Cell Biology

44. An In Vitro Study of Clonal Hematopoiesis–Associated Mutations
Theodhora Sumbulla, Biological Sciences
Advisor: Hideyuki Oguro, Assistant Professor, Cell Biology

45. Examining the Effects of a Single Nucleotide Polymorphism in the PPCDC Gene on Zinc Homeostasis
Zach Conrad, Molecular and Cell Biology
Advisor: Sangyong Choi, Assistant Professor, Nutritional Sciences

46. Zinc Transporter Responses to Zinc Availability in Intestinal Organoid Models
Lori Huang, Nutritional Sciences
Advisor: Sangyong Choi, Assistant Professor, Nutritional Sciences

47. Effects of APOE Genotype-Dependent Astrocyte Conditioned Media on Differentiated SH-SY5Y Neuronal Cells
Zayan Islam, Structural Biology and Biophysics
Advisor: Nathan Alder, Professor, Molecular and Cell Biology

48. Investigating the Role of the Fascia in the Development of Fibrodysplasia ossificans progressiva (FOP)
Liv Nevo, Molecular and Cell Biology
Advisor: David Goldhamer, Professor, Molecular and Cell Biology

49. Antimicrobial Defense of Hawaiian Bobtail Squid Eggs by Symbiotic Bacteria
Hailey DeWalt, Molecular and Cell Biology
Advisor: Spencer Nyholm, Professor, Molecular and Cell Biology

50. Localization of Nuclear and Cytoskeletal Components during DNA Damage Induced Apoptosis
Almaas Ghafoor, Molecular and Cell Biology
Advisor: Kenneth Campellone, Professor, Molecular and Cell Biology

51. Investigating the Relationship of Active Polo Kinase Localization and B Chromosome Drive during Female Meiosis
Abigail Goldhamer, Molecular and Cell Biology
Advisor: Stacey Hanlon, Assistant Professor, Molecular and Cell Biology

52. Monitoring Maintenance and Hallmarks of Cell-Stage Transitions During Long-Term Induction of Cell Cycle Arrest
Charley Damico, Molecular and Cell Biology
Advisor: Leighton Core, Associate Professor, Molecular and Cell Biology

53. Exploring *Rossellomorea spp.* as a Source for Novel Antibiotics
Akshitha Chaganti, Molecular and Cell Biology
Advisor: Patricia Rossi, Associate Professor in Residence, Molecular and Cell Biology
Advisor: Spencer Nyholm, Professor, Molecular and Cell Biology

54. Influence of Membrane Composition on the Structural Dynamics and Ligand Binding Capabilities of the 5-HT2A Receptor.
Muhammad Faisal, Molecular and Cell Biology
Advisor: Eric May, Professor, Molecular and Cell Biology

55. Beyond Local Sequence: PPI and Kinase Features Enhance Multi-PTM Site Prediction
Justin Li, Mathematics-Statistics
Advisor: Ji Yu, Associate Professor, Genetics and Genome Sciences

56. Leptospirosis Reservoir Surveillance: The Role of Deer in the Environmental Transmission of Pathogenic Leptospira
Athena Brown, Physiology and Neurobiology
Advisor: Elsio Wunder, Assistant Professor, Pathobiology and Veterinary Science

57. Pathogenic Leptospira Adherence to Endothelial Cells: A Comparison between Different Hosts Based on Outcome of Disease
Imaan Masood, Molecular and Cell Biology
Advisor: Elsio Wunder, Assistant Professor, Pathobiology and Veterinary Science

58. Recovery of Leptospires in Short- and Medium-Term Cryopreservation Using Different Dimethyl Sulfoxide Concentrations in EMEM and EMJH media
Suri Nguyen, Pathobiology
Advisor: Elsio Wunder, Assistant Professor, Pathobiology and Veterinary Science
Advisor: Camila Hamond Regua Motta Reis, Assistant Research Professor, Pathobiology

59. Investigating Immune Characteristics of a Vaccine Candidate against Two Tickborne Bandaviruses
Chris Andrei Abarientos, Pathobiology & Sociology
Advisor: Paulo Verardi, Professor, Pathobiology and Veterinary Science

60. Herbivory of *Phragmites australis* Along a Salinity Gradient in Connecticut Wetlands
Sydney Kolz, Environmental Sciences & Ecology and Evolutionary Biology
Advisor: Chris Elphick, Professor, Ecology and Evolutionary Biology

61. Water Parameter and Crustacean Community Changes in Norwalk Harbor
Amanda Stowe, Environmental Sciences
Advisor: Beth Lawrence, Associate Professor, Natural Resources and the Environment

62. Unfolding the Capniidae of Connecticut
William Tangredi, Ecology and Evolutionary Biology
Advisor: David Wagner, Professor, Ecology and Evolutionary Biology
Advisor: Katrina Menard, Professional Administrator, Ecology and Evolutionary Biology

63. A Comparative Genomic Analysis of North American Canines
Alan Rodger, Ecology and Evolutionary Biology & Anthropology
Advisor: Jill Wegrzyn, Associate Professor, Ecology and Evolutionary Biology

64. Enhancing Scalability through a Computationally Efficient Model for Single-Cell Multiomics Data
Aya Amoudi, Biomedical Engineering
Advisor: Dongyuan Song, Assistant Professor, Genetics and Genome Sciences

65. Evaluating the Effects of AI-Driven Interfaces on User Experience
Samuel Chichester, Computer Science
Advisor: Lina Kloub, Assistant Professor in Residence, School of Computing

66. Multiple Imputation by Chained Equations (MICE) vs. Simpler Approaches: A Simulation Study on Missing Data Using NHANES
Vlad Lagutin, Statistical Data Science
Advisor: Sana Gupta, PhD student, Statistics

67. Multiparameter Analysis of Timelapse Imaging Reveals the Kinetic Landscape of Clonal Expansion and Differentiation in Megakaryocitic Erythroid Progenitors
Aleck McNeil, Molecular and Cell Biology
Abeer Dhillon, Molecular and Cell Biology
Advisor: Vanessa Scanlon, Assistant Professor, Center for Regenerative Medicine and Skeletal Biology

68. In situ Mechanical Testing and Analysis of Inorganic and Organic Thin Films
Rahul Manna, Mechanical Engineering & Statistical Data Science
Advisor: Kyungjin Kim, Assistant Professor, School of Mechanical, Aerospace, and Manufacturing Engineering

69. Structure and Mechanical Behavior of Novel Ternary Cu-Based Intermetallic Compounds
Wyeth Haddock, Materials Science and Engineering
Advisor: Seok-Woo Lee, Associate Professor, Materials Science and Engineering

70. Synthesis of Air Stable Molecular Qubits
Noen Jian, Chemistry
Advisor: Tomoyasu Mani, Associate Professor, Chemistry

71. Preparation and *In Vitro* Evaluation of *In Situ* Forming Implants
Anishi Kalaria, Physiology and Neurobiology
Advisor: Diane Burgess, Distinguished Professor, Pharmaceutical Sciences

72. Impact of Macrophages on the Dissolution of Long-acting Injectable Suspension Prodrugs
Melissa Sabatella, Physiology and Neurobiology & Molecular and Cell Biology
Advisor: Diane Burgess, Distinguished Professor, Pharmaceutical Sciences

73. The Effects of Ketamine and (2R,6R)-Hydroxynorketamine on Opioid Seeking Behavior
Kayla Barca, Doctor of Pharmacy
Advisor: Gregory Sartor, Associate Professor, Pharmaceutical Sciences

74. Assessing the Use of Fondaparinux for Anticoagulation in Mechanical Heart Valve Patients
Matthew Habashy, Physiology and Neurobiology
Advisor: Youssef Bessada, Assistant Clinical Professor, Pharmacy

75. Evaluating Mechanical Properties of Hydroxyapatite Through Zn, Cu, and MgO Doping
Manal Amrani, Cognitive Science
Advisor: Steven Suib, Distinguished Professor, Chemistry

76. Nucleic Acid Nanocapsules as a Platform for Next-Generation Vaccine Delivery
Varada Konappanavar, Molecular and Cell Biology
Advisor: Jessica Rouge, Associate Professor, Chemistry

77. Lewis Acid-Catalyzed Chemoselectivity Controlled N-Alkylation and C-Alkylation of Anilines Using Vinyl Arenes
Kati Kwiatek, Physiology and Neurobiology
Advisor: Kerry Gilmore, Assistant Professor, Chemistry

78. Synthesis of Fungal Pigments for Sustainable Dyes
Rowan Solomon, Chemistry
Advisor: Michael Kienzler, Assistant Professor, Chemistry

79. Reconciling Dynamic and Structural Scattering for Charged Nanoassemblies
Jacob Leonardo, Chemical Engineering
Advisor: Mu-Ping Nieh, Professor, Chemical and Biomolecular Engineering

80. Computational Investigation of Molecular Qubits Based on Spin Correlated Radical Pairs
Arkyn Yu, Mathematics-Physics
Advisor: Tomoyasu Mani, Associate Professor, Chemistry

81. Making the Invisible Visible: Observing Subatomic Particles with a Cloud Chamber
Pragyan Yadav, Physics & Computer Science
Jason Muroski, Mechanical Engineering
Advisor: Simone Colombo, Assistant Professor, Physics

82. Thermodynamic Modeling and Analysis of a Waste Heat Recovery Process for a Solid Oxide Fuel Cell Stack Array using Thermoelectric Generating Sheaths Submerged in Water, A Combined-cycle Gas Turbine, and Organic Rankine cycles (SOFC-TG-CCGT-ORC)
Ava Tobón, Chemical Engineering
Advisor: Burcu Beykal, Assistant Professor, Chemical and Biomolecular Engineering

83. Optimizing Ethylene Cracking using Symbolic Regression
Agronil Das, Computer Science & Cognitive Science
Advisor: Burcu Beykal, Assistant Professor, Chemical and Biomolecular Engineering

SESSION 3 PRESENTATIONS

1. Gloria Al Bravo Pueblo: Venezuelan Choral Compositional Practices and Musical Nationalism in the 20th Century
Noah Medina-Pinango, Music
Advisor: Daniel Goldberg, Assistant Professor in Residence, Music

2. Cities Built on Exclusion
Margaret Singer, Environmental Studies
Andrei Abarientos, Pathobiology & Sociology
Advisor: Simon Yamawaki Shachter, Assistant Professor, Sociology

3. Latina's Political Identity, Activism, and Communities of Care
Annabel De La Cruz, History
Advisor: Melisa Argañaraz Gomez, Assistant Professor in Residence, Urban and Community Studies

4. Teacher Perceptions of Student Profiles Indicating Potential Need for Emotional Disturbance (ED) Services
Alana Tagliabue, Special Education
Advisor: Catherine Little, Professor, Educational Psychology

5. Examining Teachers' Self Efficacy Changes After A Sexual and Reproductive Health Education Workshop
Sugita Mahendarkar, Physiology and Neurobiology & IMJR: Reproductive Health and Healthcare Systems
Advisor: Sara Stifano, Associate Professor in Residence, Communication

6. Foster Care to Campus Care
Charisma Farrington, Psychological Sciences
Advisor: Eric Rice, Professor, Music

7. Higher Education in Prison in Connecticut: An Overview of Experiences, Constraints, and Institutional Politics
Josephine Burke, Political Science
Advisor: Sandy Grande, Professor, Political Science & Native American and Indigenous Studies

8. Mothering in a Racialized World: Exploring the Impact on Black Mother-Daughter Relationships
Kayanna Clarke, Human Development and Family Sciences & Psychological Sciences
Advisor: Marketa Burnett, Assistant Professor, Human Development and Family Sciences

9. The Role of Community Resources in Immigrant Family Well-being: A Qualitative Exploration of Immigrant Parents with Young Children in Two States
Julia Lucas, Exploratory
Advisor: Kevin Ferreira van Leer, Assistant Professor, Human Development and Family Sciences

10. The Intersection Between Restrictive Immigration Policies and Wellbeing -- How Healthcare Coverage Gaps Among Immigrant Families in Connecticut Cause Disproportionate Disadvantages for the Immigrant Population
Victoria Muccio, Human Development and Family Sciences & Spanish
Advisor: Terry Berthelot, Associate Professor in Residence, Human Development and Family Sciences
Advisor: Miguel Gomes, Distinguished Professor, Literatures, Cultures, and Languages

11. Exploring How Social Movements Influence the Right to Education for Undocumented Students in the United States
Bridget Quiroga, Political Science & Human Rights
Advisor: Shareen Hertel, Professor, Political Science & Human Rights
Advisor: Virginia Hettinger, Alan R. Bennett Honors Professor, Associate Professor, Political Science

12. Into the Mainstream: How White Nationalism Has Been Disseminated Online and Legitimated in the United States at Large
Shannon O'Connor, Political Science & Human Rights
Advisor: Fred Lee, Associate Professor, Political Science
Advisor: Virginia Hettinger, Alan R. Bennett Honors Professor, Associate Professor, Political Science

13. Policing the Bench: Why State Legislatures Target Judicial Ethics Commissions
Emily Grayson, Political Science
Advisor: Virginia Hettinger, Alan R. Bennett Honors Professor, Associate Professor, Political Science

14. What Shapes Youth Climate Engagement? Evaluating the Impact of Climate Change Education in Higher Ed on Youth Climate Advocacy
Emma Dutil, Political Science & Environmental Studies
Advisor: Oksan Bayulgen, Professor, Political Science
Advisor: Virginia Hettinger, Alan R. Bennett Honors Professor, Associate Professor, Political Science

15. Evaluating Substance Misuse/Use Prevention Impact: Connecticut Healthy Campus Initiative
Sage Reinhardt, Physiology and Neurobiology
Advisor: Megan O'Grady, Associate Professor, Public Health Sciences
Advisor: Marsha Murray, Clinical Research Associate, Public Health Sciences

16. A Volunteer-Facilitated Intensive Care Unit (ICU) Diary Program- A Pilot Study
Grace Gewirtz, Physiology and Neurobiology & Psychological Sciences
Advisor: Crystal Park, Distinguished Professor, Psychological Sciences

17. The Unseen Impact: Community Perceptions and Responses to Rural Maternal Healthcare Challenges in Willimantic, CT
Bryce Turner, Anthropology & Molecular and Cell Biology
Advisor: Sarah Williams, Assistant Professor, Anthropology

18. Improving Education about Health Assessment of the Neurodivergent Pediatric Population
Lauren Canniff, Nursing
Advisor: Carrie Eaton, Associate Clinical Professor, Nursing
Advisor: Leslie Lapointe, Clinical instructor, Nursing

19. A Historical Examination of Pregnancy Criminalization and Maternal Care-Seeking Within a Reproductive Justice Framework
Julia Puprriqi, Nursing
Advisor: Sharon Casavant, Assistant Professor, Nursing
Advisor: Carrie Eaton, Associate Clinical Professor, Nursing

20. A Systematic Review of Opioid Prevention Interventions and Their Effects on Overdose Education and Linkage to Care
Skylar McCall, Molecular and Cell Biology
Advisor: Safaet Sujan, Md., Allied Health Sciences

21. A Comprehensive Electronic Medical Record Review to Understand Deprescribing Following Lifestyle Change
Samveda Menon, Molecular and Cell Biology & Pathobiology
Advisor: Kara Staffier, Director of Research Operations, American College of Lifestyle Medicine
Advisor: Helen Wu, Professor, Psychiatry

22. Social and Emotional Support as an Independent Predictor of Food Insecurity: Findings from the 2024 BRFSS
Eashwar Krishna, Sociology & Molecular and Cellular Biology
Neha Shanavas, Molecular and Cell Biology & IMJR: Health Policy Informatics
Ahan Kothapeta, Molecular and Cell Biology
Advisor: Ryan Talbert, Assistant Professor, Sociology

23. Childhood Sexual Violence Impact on Adult Physical and Mental Health Outcomes
Dehjah Drye, Diagnostic Genetic Sciences
Advisor: Ryan Talbert, Assistant Professor, Sociology

24. Effects of Narrative Framing on Alcohol-Seeking Behavior
Finn McGinn, Computer Science
Kaitlyn Vitucci, Psychological Sciences
Advisor: Robert Astur, Associate Professor, Psychological Sciences

25. CBD Does Not Affect Extinction or Reinstatement of Fear in Socially Anxious Young Adults
Sarah Franzen, Pathobiology
Gabriella Harmon, Physiology and Neurobiology
Advisor: Robert Astur, Associate Professor, Psychological Sciences

26. EEG Mu Rhythm as a Neural Marker for Social Learning
Michelle Jimenez, Psychological Sciences & Philosophy
Advisor: Kimberly Cuevas, Associate Professor, Psychological Sciences

27. Early Neural Mirroring at 6- to 9-Weeks as a Predictor of Later Imitation Abilities
Faith Zhao, Psychological Sciences
Advisor: Kimberly Cuevas, Associate Professor, Psychological Sciences

28. Contributions of Anxiety Sensitivity Subscales to Generalized Anxiety and Problem-Talk in Adolescence
Emma Ronaghan, Physiology and Neurobiology & Psychological Sciences
Advisor: Kimberli Treadwell, Associate Professor, Psychological Sciences

29. Natural Language Sampling in Minimally Speaking Autistic Youth and Caregivers: Activities and Receptive-Expressive Language
Briana Ashton, Speech, Language, and Hearing Sciences
Caileigh Sweeney, Speech, Language, and Hearing Sciences
Advisor: Lindsay Butler, Assistant Professor, Speech, Language, and Hearing Sciences

30. Changes in Alpha and Beta Power Levels with Spatial Location of Background Sounds
Sarah Cole, Physiology and Neurobiology & Psychological Sciences
Advisor: Heather Read, Professor, Psychological Sciences

31. Background Sound Variability Shapes Alpha and Beta Responses During Speech-in-Noise Task Performance (-9 dB SNR)
Sanjitha Sonti, Physiology and Neurobiology
Advisor: Heather Read, Professor, Psychological Sciences

32. Rolling with Emotion: Emotional Engagement in Children with Hemiplegic Cerebral Palsy in Two Play-based Interventions
Sara Yumiseba, Physiology and Neurobiology
Advisor: Sudha Srinivasan, Assistant Professor, Kinesiology

33. Racial, Ethnic, and Socioeconomic Disparities in Acne Management In An Urban Pediatric Primary Care Clinic: A Retrospective Cohort Study
Natania Muriel, Molecular and Cell Biology
Advisor: Elizabeth Kline, Associate Professor in Residence, Molecular and Cell Biology
Advisor: Sharon Smith, Professor, Pediatrics

34. Accessing the Utility of Urinalyses for Adolescents Presenting to the ED with Isolated Testicular Pain
Nikhil Thimma, Physiology and Neurobiology
Advisor: Elizabeth Kline, Associate Professor in Residence, Molecular and Cell Biology
Advisor: Sharon Smith, Professor, Pediatrics

35. Racial Disparities in Percutaneous Coronary Intervention Outcomes Following Passage of the Affordable Care Act in Myocardial Infarction Patients
Mannat Kadian, Molecular and Cell Biology
Advisor: Michael Nanna, Assistant Professor, Cardiovascular Medicine, Yale School of Medicine

36. Leveraging U11 Knockout Mice to Study the Transcriptomic Consequences of Minor Spliceosome Inhibition in the Developing Limb and Spermatogenesis
Taveena Konakanchi, Physiology and Neurobiology
Advisor: Rahul Kanadia, Associate Professor, Physiology and Neurobiology

37. Investigating the Effects of KrasG12D Signaling on Cortical Progenitor Proliferation
Srihitha Mitta, Biomedical Engineering
Advisor: Rahul Kanadia, Associate Professor, Physiology and Neurobiology

38. Identification of Thermosensory and Hygrosensory Receptors Involved in Food-Seeking Behavior in Drosophila
Rebecca O'Connor, Physiology and Neurobiology & Psychological Sciences
Advisor: Karen Menuz, Associate Professor, Physiology and Neurbiology

39. Assessing Cell Death in Drosophila Olfactory Neurons Across Tau Knockout and Knock-In Mutants
David Tolmach, Molecular and Cell Biology & Human Development and Family Sciences
Advisor: Karen Menuz, Associate Professor, Physiology and Neurobiology

40. Contribution of Adult Hippocampal Neurogenesis to Fear Generalization and Discrimination
Aditi Malpure, Molecular and Cell Biology
Advisor: Sebnem Tuncdemir, Assistant Professor, Neuroscience

41. Dissecting the Hippocampal Inputs Contributing to Aversive Context Generalization
Brady Cheneski, Physiology and Neurobiology & Molecular and Cell Biology
Advisor: Sebnem Tuncdemir, Assistant Professor, Neuroscience

42. Spine Apparatus Density Across Brain Regions Involved in Fear Learning
Linnea Avola, Biological Sciences
Advisor: Linnaea Ostroff, Associate Professor, Physiology and Neurobiology

43. The Anatomical Characterization of Prefrontal Corticothalamic Neurons Targeting the Nucleus Reuniens and Mediodorsal Thalamus
Ademide Ogunsina, Molecular and Cell Biology
Advisor: Timothy Spellman, Assistant Professor, Neuroscience

44. Parental Impact on Chromosome Organization in Drosophila
Peter Fatzinger, Molecular and Cell Biology
Advisor: Jelena Erceg, Assistant Professor, Molecular and Cell Biology

45. Subcellular Distribution of P2X4 Receptors after Ischemic Stroke
Nitya Tarala, Molecular and Cell Biology
Advisor: Rajkumar Verma, Assistant Professor, Neuroscience

46. Processing Bodies Inhibit the Non-Canonical Inflammasome
Jack Wang, Allied Health Sciences
Advisor: Yanlin Wang, Professor, Medicine
Advisor: Penghua Wang, Associate Professor, Immunology

47. Sunrise, Sunset: How the Gut Microbiome Responds to Light
Andreana DeCarlo, Biomedical Engineering
Advisor: Yanjiao Zhou, Associate Professor, Medicine

48. Genetic Mapping of a Novel Tumor Suppressor Gene Mutation
Temoor Shah, Physiology and Neurobiology
Advisor: Jianzhong Yu, Associate Professor, Physiology and Neurobiology

49. Investigation of Anesthetic-induced Mortality in a Mouse Model of Rett Syndrome
Alexandra Salem, Structural Biology and Biophysics
Advisor: Daniel Mulkey, Professor, Physiology and Neurobiology

50. Conditional Loss of Hox11 Function in Synovial Joint Progenitors Does Not Fully Recapitulate Global Loss of Function
Ruupala Kalaiarasu, Molecular and Cell Biology
Advisor: Danielle Rux, Assistant Professor, Orthopedic Surgery

51. Disease Responses in a Human Osteoarthritis Ex Vivo Model
Akshaj Ganta, Physiology and Neurobiology
Advisor: Caroline Dealy, Professor, Orthodontics, Biomedical Engineering, Orthopedic Surgery & Cell Biology

52. Associations between Muscle-Specific Function and Echo Intensity, and the UConn Senescence-Associated Secretory Phenotype (SASP)
Aaditya Jain, Molecular and Cell Biology & Healthcare Management
Advisor: Jacob Earp, Assistant Professor, Kinesiology

53. No Title Provided
Christian Thompson, Physiology and Neurobiology
Advisor: Spencer Nyholm, Professor, Molecular and Cell Biology

54. Acetyl-CoA synthetase (ACS) in the Human-associated Methanogen Methanobrevibacter smithii
Zara Tariq, Molecular and Cell Biology
Advisor: Michel Geovanni Santiago-Martinez, Assistant Professor, Molecular and Cell Biology

55. The Integration Gap: A Connecticut Audit of AI-Enabled Supports for Neurodivergent Students
Sophia Gomez Reynoso, Computer Science
Troy Murphy, Computer Science
Advisor: Lina Kloub, Assistant Professor in Residence, School of Computing

56. Looking Into Brain to Muscle Connection by Studying Motor Control Using Transcranial Magnetic Stimulation (TMS)
Jasmine Decossard, Physiology and Neurobiology
Advisor: Nabin Koirala, Facility Scientist, Center for Open Research Resources and Equipment

57. Molecular Validation of a KLF2 Overexpression Plasmid for Functional Assays
Annice Proud, Molecular and Cell Biology
Advisor: Guangfu Li, Professor, Surgery

58. The Genetic Basis of Floral Trait Variation in *Mimulus*
Julia Johnson, Ecology and Evolutionary Biology
Advisor: Yaowu Yuan, Professor, Ecology and Evolutionary Biology
Advisor: Amy LaFountain, Assistant Research Professor, Ecology and Evolutionary Biology

59. Housewarming Gifts - Candidatus Endoriftia persephonae & the Type I secretion system
Andrew Deierlein, Molecular and Cell Biology & Pathobiology
Advisor: Jill Wegrzyn, Associate Professor, Ecology and Evolutionary Biology
Advisor: Rachel O'Neill, Distinguished Professor, Molecular and Cell Biology

60. A Day at the American Beech: Molecular Mechanisms of Resistance in an Iconic North American Tree
Tyler Cocchiola, Ecology and Evolutionary Biology
Avery DeSilva, Ecology and Evolutionary Biology
Nicholas Hancox, Molecular and Cell Biology
Anastasia Serating, Plant Sciences
Jenna Kent, Ecology and Evolutionary Biology
Peyton Durant, Molecular and Cell Biology
Deirdre McCrohan, Biological Sciences
Advisor: Jill Wegrzyn, Associate Professor, Ecology and Evolutionary Biology
Advisor: Rachel O'Neill, Distinguished Professor, Molecular and Cell Biology

61. Multipolar Mitosis as a Self-Correction Mechanism for Polyploidy in Pre-implantation Mouse Embryos
Klaudia Bielski, Pathobiology
Advisor: Xiuchun Tian, Professor, Animal Science

62. Breed-Specific Susceptibility to Ringworm in Dairy Cattle: A Comparative Study of Holstein and Jersey Heifers
Claire Zess, Animal Science
Advisor: Breno Fragomeni, Associate Professor, Animal Science

63. An Analysis of Bacterial Localization within the Gut Microbiome of Mytilus edulis using Scanning Electron Microscopy following Antibiotic Exposure
Reyes Umanzor Jr, Marine Sciences
Advisor: J. Evan Ward, Professor, Marine Sciences

64. SAXOPHONE: Developing a Field Detection Device for Harmful Algal Blooms
Sabina Csak, Chemical Engineering
Sankalp Borah, Molecular and Cell Biology
Sabrina Newenham, Molecular and Cell Biology
Santino Siccone, Pathobiology
Advisor: Kate Castellano, Assistant Research Professor, Systems Genomics Institute

65. Insight into Advanced Glycated End Products and their Effects on Tropoelastin
Anshuma Salvaji, Physiology and Neurobiology
Advisor: Anna Tarakanova, Associate Professor, School of Mechanical, Aerospace, and Manufacturing Engineering
Advisor: Metehan Cam, Postdoctoral Research Associate, Institute for Collaboration on Health, Intervention, and Policy (InCHIP)

66. Adhesion and Liquid Diffusion in Engineered Porous Skin-Analogs
Thu Do, Biomedical Engineering
Advisor: Patrick Kumavor, Associate Professor in Residence, Biomedical Engineering

67. Nanomedicine Research for Intra-Articular Cell Delivery Therapies
Claudia Huang, Biomedical Engineering
Advisor: Yupeng Chen, Associate Professor, Biomedical Engineering

68. Developing NLS-based Polymeric Nanoparticles for Enhanced Nuclear Delivery
Mahathi Veluri, Molecular and Cell Biology
Advisor: Raman Bahal, Associate Professor, Pharmaceutical Sciences

69. Targeting Translesion Synthesis Polymerases to Overcome Gemcitabine Resistance in Breast Cancer
Minji Kim, Pharmacy Studies
Advisor: Hunmin Jung, Assistant Professor, Pharmaceutical Sciences

70. Optimization of Liposomal Multidrug Co-encapsulation of Paclitaxel and Docetaxel Through Continuous Manufacturing
Ian Metcalfe, Physiology and Neurobiology
Advisor: Diane Burgess, Distinguished Professor, Pharmaceutical Sciences

71. DNA Strand Breaks by Small Molecules: From Genomic Hazard to Therapeutic Strategy
Clerin John, Molecular and Cell Biology & IMJR: Community Health and Social Inequalities
Advisor: Raman Bahal, Associate Professor, Pharmaceutical Sciences
Advisor: David Daggett, Associate Professor in Residence, Molecular and Cell Biology

72. Synergistic Enhancement of Enzyme Stability Using Crowding Molecules in Nanobioreactors
Divine Adekoya, Chemical Engineering
Advisor: Eugene Pinkhassik, Associate Professor, Chemistry

73. Alpha LogD: Leveraging MS Compatibility for Optimized LogD Measurements
Leo Goetz, Chemistry
Advisor: Gaël Ung, Associate Professor, Chemistry
Advisor: James Bradow, Senior Principal Scientist, Pfizer Inc.
Advisor: Gilles Goetz, Principal Scientist, Pfizer Inc.

74. Tuning Magnetic Sensitivity of Molecular Qubits via Solid-State Engineering
Isabella Bruzzese, Mathematics-Physics
Advisor: Tomoyasu Mani, Associate Professor, Chemistry

75. Machine-Learning Analysis of Reaction-Diffusion-Based Pigmentation Patterns in Monkeyflowers (Mimulus)
Reesha Patel, Statistical Data Science
Advisor: Michael Blinov, Associate Professor, Center for Cell Analysis and Modeling

76. Target and Untargeted Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Medical Equipment
Isabella Naso, Chemistry
Melanie Khalfin, Molecular and Cell Biology
Advisor: Anthony Provatas, Organics Laboratory Manager and Research Professor, Center for Environmental Sciences and Engineering

77. Synthesis of Colloidal Gold Nanoparticles for Applications in Chemical Sensor Arrays
Amira Veldman-Wilson, Chemistry
Advisor: Jing Zhao, Professor, Chemistry

78. Photopharmacological Control of Store-Operated Calcium Entry in Jurkat-Lucia NFAT Reporter T Cells Using Photoswitchable ML-9 Derivatives
José Matute Gálvez, Molecular and Cell Biology, Allied Health Sciences, & IMJR: Biochemical Systems in Health and Disease
Advisor: Michael Kienzler, Assistant Professor, Chemistry

79. Electrocatalytic Oxidative Amidation of Aldehydes for the Synthesis of N-acyl Azoles
Ashly Gasior, Chemistry & Physics
Advisor: Nicholas Leadbeater, Professor, Chemistry

80. Provenance and Timing of Pleistocene Detrital Carbonate Beds in IODP Sites U1603 and U1604 on the NW Greenland Margin: Implications for Ice Sheet Dynamics in Baffin Bay
Elias Utterback, Earth Sciences
Advisor: Tracy Frank, Professor, Earth Sciences

81. Nanoindentation Study on Mechanical Hysteresis of Nanoporous Amorphous Carbon
Cydney Sottile, Materials Science and Engineering
Advisor: Seok-Woo Lee, Associate Professor, Materials Science and Engineering

82. Nanoindentation Study of Laser-Glazed Supersaturated AlCo Alloys
Reid Morrow, Materials Science and Engineering
Advisor: Seok-Woo Lee, Associate Professor, Materials Science and Engineering

83. Electronic Ceramic Material Synthesis for Battery Applications
Maya Grabowski, Management and Engineering for Manufacturing
Advisor: Maruf Ahmed, Graduate Student, Material Science and Engineering

Special Thanks

The Office of Undergraduate Research wishes to thank the deans of the represented schools and colleges, the Office of the Provost, the Office of the Vice President for Research, and the generous donors to Enrichment Programs and to the Honors Program for their support of undergraduate research. In addition, we thank the following individuals for their support:

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Pamir Alpay*, Interim Provost and Executive Vice President for Academic Affairs*

Jennifer Lease Butts, *Associate Vice Provost, Enrichment Programs and Director, Honors Program*

Student Volunteers for the Spring Frontiers Poster Exhibition

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Jodi Eskin, *Program Administrator and Advisor*

Emily Schwab, *BOLD Director and Advisor*

OUR Peer Research Ambassadors

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Julia Armington ’27 (ENG)
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Hailey DeWalt ’26 (CLAS)
Ashly Gasior ’27 (CLAS)
Olivia Joyce ’27 (CLAS)
Ruupala Kalaiarasu ’27 (CLAS)
José Matute Gálvez ’26 (CLAS, CAHNR)
Malak Nechnach ’26 (CLAS)
Brielle Pierre Philippe ’27 (CLAS)
Annette St. Jacques ’26 (CLAS)
Alana Wolfson ’27 (CAHNR)

Alphabetical Listing of Presenters with Poster Numbers

S1 denotes a Session 1 presentation – Wednesday, April 15 at 2:00 p.m.
S2 denotes a Session 2 presentation – Wednesday, April 15 at 4:00 p.m.
S3 denotes a Session 3 presentation – Wednesday, April 15 at 6:00 p.m.

Abarientos, Chris Andrei – 59 (S2)
Adekoya, Divine – 72 (S3)
Agrawal, Anika – 30 (S1)
Agyemang, Joel – 35 (S2)
Amodeo, Olivia – 39 (S1)
Amoudi, Aya – 64 (S2)
Amrani, Manal – 75 (S2)
Anderson, Ava – 40 (S2)
Anikeev, Katerina – 17 (S1)
Ashton, Briana – 29 (S3)
Avola, Linnea – 42 (S3)
Baiju, Preeti – 30 (S2)
Bailey, Nicholas – 73 (S1)
Banschick, Micah – 79 (S1)
Barca, Kayla – 73 (S2)
Batchelar, Katharine – 55 (S1)
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